

ABSTRACT

A system architecture for ensuring QoS levels to different inter-media streams or media streams of an intra-media stream. In such a system, an RLP layer classifies transmission data streams by priority level and separates each transmission data stream into data streams of predetermined lengths according to characteristics of the data streams. A MUX layer segments the separated data streams according to a data rate. A plurality of MQC channels encode the segmented data at a predetermined code rate, repeat code symbol sequences with higher priority levels, and puncture code symbol sequences with lower priority levels. A serial concatenator serially concatenates the repeated and punctured code symbol sequences.